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Term: ((sic or silicon carbide) near (capillary or bond tool)) and boron

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<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT,JPAB,EPAB,DWPI,TDBD	((sic or silicon carbide) near (capillary or bond tool)) and boron	4	<u>L6</u>
USPT,JPAB,EPAB,DWPI,TDBD	(sic or silicon carbide) near (capillary or bond tool)	20	<u>L5</u>
USPT,JPAB,EPAB,DWPI,TDBD	semiconductor adj capillary	9	<u>L4</u>
USPT,JPAB,EPAB,DWPI,TDBD	12 and wire bond	14	<u>L3</u>
USPT,JPAB,EPAB,DWPI,TDBD	(capillary or tip) near semiconductor	347	<u>L2</u>
DWPI,USPT,EPAB,JPAB,TDBD	(capillary or tip) and semiconductor	24701	<u>L1</u>

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT,JPAB,EPAB,DWPI,TDBD	wire bond and ((capillary or tip or tool) near (ceramic or alumina or zirconia or Al ₂ O ₃ or ZrO ₂))	24	<u>L7</u>
USPT,JPAB,EPAB,DWPI,TDBD	wire bond and (capillary or tip or tool) and (ceramic or alumina or zirconia or Al ₂ O ₃ or ZrO ₂)	724	<u>L6</u>
USPT,JPAB,EPAB,DWPI,TDBD	I2 and tungsten carbide and titanium and nitride and carbide	0	<u>L5</u>
USPT,JPAB,EPAB,DWPI,TDBD	I2 and diamond and boron	0	<u>L4</u>
USPT,JPAB,EPAB,DWPI,TDBD	I1 and ((dissipative or semiconductor) adj (capillary or tip or tool))	12	<u>L3</u>
USPT,JPAB,EPAB,DWPI,TDBD	I1 and ((capillary or tip or tool) near (dissipative or semiconductor))	39	<u>L2</u>
USPT,JPAB,EPAB,DWPI,TDBD	wire bond and (capillary or tip or tool) and (dissipative or semiconductor)	1771	<u>L1</u>

09/5/4454
Part of paper No. 7

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Term: wire bond and ((capillary or tip or tool) near
(ceramic or alumina or zirconia or Al2O3 or ZrO2))

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L7: Entry 24 of 24

File: DWPI

Jul 7, 1988

DERWENT-ACC-NO: 1988-230938

DERWENT-WEEK: 198833

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TITLE: Ceramic capillary structure for wire bonding - where top portion comprises silicon, aluminium, and yttrium NoAbstract Dwg 0/3

PATENT-ASSIGNEE:

ASSIGNEE	CODE
KYOCERA CORP	KYOC

PRIORITY-DATA:

1986JP-0312550	December 25, 1986
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PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 63164228 A	July 7, 1988	N/A	004	N/A

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-NO
JP63164228A	December 25, 1986	1986JP-0312550	N/A

INT-CL (IPC): H01L 21/60

ABSTRACTED-PUB-NO:

EQUIVALENT-ABSTRACTS:

TITLE-TERMS: CERAMIC CAPILLARY STRUCTURE WIRE BOND TOP PORTION COMPRISE SILICON ALUMINIUM YTTRIUM NOABSTRACT

DERWENT-CLASS: L02 L03 U11

CPI-CODES: L04-C17; L04-C24;

EPI-CODES: U11-E01A;

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L5: Entry 46 of 46

File: DWPI

Mar 19, 1979

DERWENT-ACC-NO: 1979-33968B

DERWENT-WEEK: 197918

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TITLE: High strength ceramics - contg. a titanium-carbon-nitrogen-oxygen system
cpd. and aluminium oxide

PATENT-ASSIGNEE:

ASSIGNEE	CODE
MITSUBISHI METAL CORP	MITV

PRIORITY-DATA:

1977JP-0103145 August 30, 1977

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 54037114 A	March 19, 1979	N/A	000	N/A
JP 86004787 B	February 13, 1986	N/A	000	N/A

INT-CL (IPC): B23B 27/14; C04B 35/58

ABSTRACTED-PUB-NO: JP54037114A

BASIC-ABSTRACT:

The ceramics comprise 1-50 wt. % of $Ti(CuNvOw)_x$ where $(u+v+w)=1$, $0 < u \leq 0.9$, $0 < v \leq 0.9$, $0.1 \leq w \leq 0.8$ and $0.6 \leq x \leq 1.1$, the balance being aluminium oxide and unavoidable contaminants.

In an example, 75 wt. % powdery Al₂O₃ and 25 wt. % Ti (C0.8N0.300.4)0.945 both having an average particle size of 1 mu, were charged in a ceramic ball mill and wet milled in an alcoholic solvent for 24 hrs. The dried mixt. was compressed into a shape which was then sintered by maintaining it at 1800 degrees C in vacuo under a load of 200 kg/cm² for 10 min. to prepare a thermet. Cutting tips were made of the thermet, conventional aluminium ceramics and conventional Al₂O₃-TiC ceramics and tested for the abrasion of the flank and crater abrasion. The abrasion of the flank is 0.2 mm for the ceramic tip and 0.35 and 0.42 mm for conventional alumina ceramic tip and Al₂O₃-TiC ceramic tip, respectively. The crater abrasion is 20 mu for the ceramic tip and 20 and 45 mu for the control tips, respectively .

The ceramics show high toughness, abrasion resistance and, antioxidants.

TITLE-TERMS: HIGH STRENGTH CERAMIC CONTAIN TITANIUM CARBON NITROGEN OXYGEN SYSTEM COMPOUND ALUMINIUM OXIDE

DERWENT-CLASS: L02 P54

CPI-CODES: L02-G01;